

WHAT IS CLAIMED IS:

1. A federated system with state comprising:
  - 5 a. a bus;
  - b. consolidated data stores, connected to the bus;
  - c. means for core services, connected to the bus;
  - d. means for public process applications, connected to the bus;
  - e. a plurality of private process connectors, each connected to the bus and each adapted to connect with a private process application of a participant; and
  - 10 f. a web connection, connected to the bus and adapted to connect to third party services,

wherein

the consolidated data stores contain retail automotive industry data including:

- 15 a. an operational data store; and
- b. a data warehouse for automobile service, automobile parts, and automobile customers,

the core services include:

- a. management of participant trading agreements;
- 20 b. public process application integration;
- c. integration of private process applications to public processes;
- d. metachannel support and directory;
- e. data transformation; and

f. internal business support functions, including monitoring and billing,

the public process applications include:

- a. a warranty workflow application;
- b. a parts management application;
- c. a service scheduling application;
- d. a service history application; and
- e. an inventory management application,

the private process connectors include:

- a. a dealer management system connector;
- b. a dealer communication system connector;
- c. an automobile manufacturer internal system connector; and
- d. a finance company internal system connector,

the participants include:

- a. automobile consumers;
- b. automobile manufacturers;
- c. government entities;
- d. automobile exchanges; and
- e. external data suppliers,

the connectors comprise:

- a. an application specific interface;
- b. a translation layer; and
- c. an interface specific to the bus,

the third party services comprise:

- a. automotive finance;
- b. lead management;
- c. automotive research;
- d. insurance; and
- e. parts locator, and

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the bus comprises

- a. a physical bus, with a plurality of channels;
- b. a metachannel for connecting channels to each other;
- c. a plurality of compound processes that interact with the plurality of channels and the metachannel;
- d. a first process engine to facilitate the reading of messages from, and the writing of messages to channels;
- e. a metachannel engine to control the interactions with the metachannel;
- f. a metachannel repository that stores process services available to a plurality of applications;
- g. a singular process model to identify the steps to be taken by a singular public process engine for processing a singular public process; and
- h. a conductor that interacts with the compound processes to process the messages,

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wherein the conductor comprises:

- a. a second process engine that executes compound processes;
- b. a compound process repository that stores compound processes;
- c. a process engine user interface to monitor and manage the second

- process engine;
- d. a conductor engine that controls the operation of the second process engine;
- e. a conductor repository that stores participant objects and relationship objects; and
- 5 f. a conductor user interface to monitor and manage the conductor engine.

2. A federated system with state comprising:

- 10 a. a bus, wherein one element of the bus is a conductor comprising:
1. a second process engine that executes compound processes;
  2. a compound process repository that stores compound processes;
  3. a process engine user interface to monitor and manage the second process engine;
  4. a conductor engine that controls the operation of the second process engine;
  5. a conductor repository that stores participant objects and relationship objects; and
  6. a conductor user interface to monitor and manage the conductor engine;
- 15 b. consolidated data stores, connected to the bus;
- c. means for core services, connected to the bus;
- d. means for public process applications, connected to the bus;
- e. a plurality of private process connectors, each connected to the bus and each adapted to connect with a private process application of a participant; and
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- 1 f. a web connection, connected to the bus and adapted to connect to third party services.
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3. The system in claim 2 where the consolidated data stores contain retail automotive
- 5 industry data including:
- 6 a. an operational data store; and
- 7 b. a data warehouse for automobile service, automobile parts, and automobile
- 8 customers.
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- 10 4. The system in claim 2, where the core services further include:
- 11 a. management of participant trading agreements;
- 12 b. public process application integration;
- 13 c. integration of private process applications to public processes;
- 14 d. metachannel support and directory;
- 15 e. data transformation; and
- 16 f. internal business support functions, including monitoring and billing.
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- 18 5. The system in claim 2, where the public process applications include:
- 19 a. a warranty workflow application;
- 20 b. a parts management application;
- 21 c. a service scheduling application;
- 22 d. a service history application; and
- 23 e. an inventory management application.

6. The system in claim 2, where the private process connectors include:

- a. a dealer management system connector;
- b. a dealer communication system connector;
- 5 c. an automobile manufacturer internal system connector; and
- d. a finance company internal system connector.

7. The system in claim 2, where the participants include:

- a. automobile consumers;
- 10 b. automobile manufacturers;
- c. government entities;
- d. automobile exchanges; and
- e. external data suppliers.

15 8. The system of claim 2 where the third party services comprise:

- a. automotive finance;
- b. lead management;
- 20 c. automotive research;
- d. insurance; and
- e. parts locator.

9. The system of claim 2 where the public process applications are selected from the group comprising automotive retail applications.

10. The system of claim 2, wherein the connectors comprise:

- a. an application specific interface;
- b. a translation layer; and
- c. an interface specific to the bus.

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11. The system of claim 2, where the private process application is selected from the group comprising automotive retail applications.

10 12. The system of claim 2 where the third party services are selected from the group comprising automotive retail services.

15 13. The system of claim 2 where the participants are selected from the group comprising participants in the automotive retail industry.

14. The system of claim 2 where the consolidated data store is selected from the group comprising data sources used in the automotive retail industry.

20 15. The system of claim 2 where the public processes comprise singular public processes and compound public processes.

16. The system of claim 2 where the private process applications read messages from and write messages to channels.

17. The system of claim 2, wherein the bus further comprises a metachannel for connecting channels to each other.

5      18. The system of claim 2, wherein the bus further comprises a plurality of compound processes that interact with a plurality of channels and a metachannel.

19. The system of claim 2, wherein the bus further comprises a first process engine to facilitate the reading of messages from, and the writing of messages to channels.

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20. The system of claim 2, wherein the bus further comprises a metachannel engine to control the interactions with a metachannel.

15      21. The system of claim 2, wherein the bus further comprises a metachannel repository that stores process services available to a plurality of applications.

22. The system of claim 2, wherein the bus further comprises a singular process model to identify the steps to be taken by a singular public process engine for processing a singular public process.

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23. The system of claim 2, wherein the conductor interacts with a plurality of compound processes to process messages.

24. The system of claim 2, wherein the core services comprise presentation, connectivity, workflow, data, and hosting.

25. A bus comprising

- 5        a. a physical bus, with a plurality of channels;
- b. a metachannel for connecting channels to each other;
- c. a plurality of compound processes that interact with the plurality of channels and the metachannel;
- d. a first process engine to facilitate the reading of messages from, and the writing of messages to channels;
- e. a metachannel engine to control the interactions with the metachannel;
- f. a metachannel repository that stores process services available to a plurality of applications;
- g. a singular process model to identify the steps to be taken by a singular public process engine for processing a singular public process; and

10        h. a conductor that interacts with the compound processes to process the messages,

15        wherein the conductor comprises

- 1. a second process engine that executes compound processes;
- 2. a compound process repository that stores compound processes;
- 20        3. a process engine user interface to monitor and manage the second process engine;
- 4. a conductor engine that controls the operation of the second process engine;
- 5. a conductor repository that stores participant objects and relationship objects;

and

6. a conductor user interface to monitor and manage the conductor engine.

26. A conductor comprising:

- 5        a.      a second process engine that executes compound processes;
- b.      a compound process repository that stores compound processes;
- c.      a process engine user interface to monitor and manage the second process  
                engine;
- 10        d.      a conductor engine that controls the operation of the second process  
                engine;
- e.      a conductor repository that stores participant objects and relationship  
                objects; and
- f.      a conductor user interface to monitor and manage the conductor engine.

15        27. The invention in claim 26 wherein the conductor repository further stores restrictions  
                regarding said compound processes.

20        28. The invention in claim 26 wherein the conductor repository further comprises an  
                object model that directs interactions among processes, participants, metachannels and  
                applications.

29. The invention in claim 26 wherein the conductor engine further enforces the  
                restrictions stored in the conductor repository.

30. The invention in claim 26 wherein the process engine user interface further provides the capability to enter process models for the second process engine.
- 5      31. The invention in claim 26 wherein the conductor user interface further provides the capability to enter process models for the conductor engine.